Name: KUROWSKI, JOSEPH Case#: 24586 Page: 1 of 18
Type: Comprehensive Assessment Adult Date: 05/13/2016
Printed on 09/13/2016 at 02:08 PM (Final Approved on 05/15/2016 at 06:41 PM)

Mid-Erie Counseling and Treatment Services

COMPREHENSIVE ASSESSMENT FOR ADULTS

Client meets criteria for admission: ⊙ Yes ○ No

Notice of rights has been provided client/guardian: ⊙ Yes ○ No

Limits of Confidentiality explained before beginning? ⊙ Yes ○ No

Source (s) of Information:
Client

Presenting problem (include impact on social, work, and/or academic functioning):

Joseph was referred by Kathleen Horvatits and is on Federal Probation. Due to client being pre-trial, his case was not discussed.

Current symptoms (describe symptoms, their onset, severity, frequency, duration):

Joseph reports that he has been experiencing anxiety since he can remember. He reports that he doesn't remember a time without anxiety. He reports that started experiencing panic attacks; having a heavy chest, uncontrollable crying, hyperventilation. He reports that he experiences this every once inawhile, randomly. He reprots that he has a little bit of social anxiety. He reports that he can talk to people for a job, but when it comes to making friends, he reports, "I can't do it, I just don't have enought ot talk about." He reports that he also pulls his hair and has done so since he was a teenager. He reports that he was diagnosed with Trichtillomania when he was a kid. "I feel like when I pull out my hair, I release pressure built up in my head, so the more stress I have, the more pressure I feel, the more I pull my hair." He reports that he experienced extrreme depression after a breakup after a breakup his freshman year and that he spent his entire freshman year crying every day, not eating and feeling extremely depressed. He reports that the only thing that brough him out of his depression was being successfull in college in his music major.
He reports that he is experiencing depression for a long time, since middle school. He reports that at the end of middle school he lost his best friend. He reports that his friend got realy into drugs and he stopped talking to him after that.
He reports that he was diagnosed with Narcoleptsy and takes two medications for it. He reports that when he is not on his medication, he has difficulty sleeping, breathing when he's sleeping and focusing. "It's like youre runing through a forest and every tree you pass is a new idea." He reports that he has attacks when he focuses too hard and is not on his medication. He reports that before he was medicated, he was hallucinating and seeing things. He reported that it got bad during college; "It got so bad that I didn't know what was real or what was not real. I would fall asleep, and I could hear people talking, but i didn't know what was being said." He denies auditory/visual hallucinations currently now that his disorder is under control.

Describe any current stressors and/or precipitating events:

Joseph reports that the stress of the case and not being able to work or do anything is stressing him out and that he has been having random severe panic attacks and pulling his hair due to the extreme stress.

Describe what the client knows about the concept of "recovery:"

Joseph reports that he would like to gain control of his anxiety, depression and work on reducing stress.

Describe the extent to which the client is hopeful about treatment, change, and the future:

Joseph reports that he would like to gain control of his anxiety, depression and work on reducing stress.

Is client currently in psychiatric treatment of any type? ○ Yes ◉ No

Describe current treatment (include type of treatment and providers, effectiveness, et cetera):

denies

PAST PSYCHIATRIC TREATMENT

Has client ever been in the hospital for mental health treatment?	○ Yes	◉ No	○ Information not available
If so, number of psychiatric hospitalizations:			
Has client ever been in outpatient care for mental health treatment?	○ Yes	◉ No	○ Information not available
If so, number of outpatient psychiatric admissions:			
Has client ever been in a day treatment program?	○ Yes	◉ No	○ Information not available
Has client ever been in a residential treatment center?	○ Yes	◉ No	○ Information not available

MH/CD Treatment History

Past psychiatric treatment comments:

He reports no past psychiatric treatment and that he wanted treatment last year and that he didn't engage because his mother was too busy to deal with his mental health issues.

History of psychiatric symptoms experienced in the past (symptoms, onset, severity, frequency, duration):

Joseph reports that he has been experiencing anxiety since he can remember. He reports that he doesn't remember a time without anxiety. He reports that started experiencing panic attacks; having a heavy chest, uncontrollable crying, hyperventilation. He reports that he exporiences this every once inawhile, randomly. He reprots that he has a little bit of social anxiety. He reports that he can talk to people for a job, but when it comes to making friends, he reports, "I can't do it, I just don't have enought ot talk about." He reports that he also pulls his hair and has done so since he was a teenager. He reports that he was diagnosed with Trichtillomania when he was a kid. "I feel like when I pull out my hair, I release pressure built up in my head, so the more stress i have, the more pressure I feel, the more I pull my hair." He reports that he experienced extreme depression after a breakup after a breakup his freshman year and that he spent his entire freshman year crying every day, not eating and feeling extremely depressed. He reports that the only thing that brough him out of his depression was being successfull in college in his music major.
He reports that he is experiencing depression for a long time, since middle school. He reports that at the end of middle school he lost his best friend. He reports that his friend got realy into drugs and he stopped talking to him after that.
He reports that he was diagnosed with Narcoleptsy and takes two medications for it. He reports that when he is not on his medication, he has difficulty sleeping, breathing when he's sleeping and focusing. "It's like youre runing through a forest and every tree you pass is a new idea." He reports

that he has attacks when he focuses too hard and is not on his medication. He reports that before he was medicated, he was hallucinating and seeing things. He reported that it got bad during college; "It got so bad that I didn't know what was real or what was not real. I would fall asleep, and I could hear people talking, but i didn't know what was being said." He denies auditory/visual hallucinations currently now that his disorder is under control.

Any history of thoughts/plans/acts/ideation or intention of suicide? ⊙ Yes ○ No

Describe:

Joseph reported that in the past, he used to think that if he was hurt in some way, that his family and/or girlfriend would pay attention to him. He reports that currently he has been having thoughts because he is very future oriented and that if he is going to have his future taken away from him, "to me, it's just not worth it. At that point, why bother. It's not that I want to commit suicide, but my life is over, so why bother."

Any history of thoughts/plans/acts/ideation or intention of homicide? ○ Yes ⊙ No

Describe:

enies

ADDICTIONS INFORMATION

Does Client have a significant history of and/or current behavior concern in any of the following areas?

Alcohol and/or other substance use? ○ Yes ⊙ No

Gambling? ○ Yes ⊙ No

Sexual acting out, pornography, sex crimes, etc? ⊙ Yes ○ No

Overeating, restricting, or purging food? ○ Yes ⊙ No

If the answer is "yes" to one or more of the questions in this section, complete the "Addictions" tab.

MILITARY HISTORY

Has client ever served in the military? ○ Yes ⊙ No

What branch? ○ Army ○ Navy ○ Marines ○ Air Force ○ Coast Guard ○ Other

Type of discharge: ○ Honorable ○ Dishonorable ○ General ○ Other

Comments on the experience, any trauma, et cetera:

TRAUMATIC EVENTS

Current or past experience of being abused or neglected:
Emotional
Verbal
Physical

Describe the above, or any other traumatic experience:

He reports that his father is severely depressed and often physically, emotionally and verbally abusive.

FAMILY

Does client have any signficant history of and/or current family concerns which impact presenting problem?

⊙ Yes ○ Denies

If the answer is "yes", complete the "Family" tab.

INTIMATE RELATIONSHIPS AND CURRENT LIVING SITUATION

Current marital status: Never Married Number of times married: 0

If married (or in a significant relationship) more than once, explain reasons for each divorce or separation:

NA

Describe relationship with current partner:

NA

Sexual issues of concern:

MA

Current living arrangement (select one) Family

Number of persons other than the client living in the home 4

Household Members

Living environment (condition of home): ⊙ In good condition ○ In need of repair ○ Not applicable

How many times has client's residence changed in the last two years? 0

Current home atmosphere:
Competitive
Other

Describe current living situation:

"I don't feel stressed living with my family, truth be told I don't want to move out. I love my brothers and my family and those sourroundings." He reports when his dad is aggrivating him he is able to go into his own room as a getaway. He reports that his parents recently took his door off of his room "as a statement to not having my own privacy."

Is client satisfied with his/her current living situation? ⊙ Yes ○ No

Does the client have children? ○ Yes ⊙ No

If yes, give names and ages, where children live, and describe relationships with children:

NA

Overall quality of interpersonal relationships (length, amount of difficulty forming and maintaining):

see above _friendships

Is family psychoeducation needed? ○ Yes ⊙ No

Explain:

CULTURAL, GENDER, AND SPIRITUAL CONSIDERATIONS

Does client identify with a particular cultural group? ○ Yes ⊙ No

If so, describe group:

denies

Gender and/or Sexual Orientation Issues:

denies

Primary Religious Affiliation: Catholic

Describe religious or spiritual beliefs and practices:

Catholic/Anglocan - He is not permitted to attend church and currently is content with not attending.
"I believe that there is a God, but that he has nothing to do with us."

Are there cultural, gender, sexual orientation, or spiritual beliefs likely to impact treatment? ○ Yes ⊙ No

If yes, explain:

EDUCATIONAL AND DEVELOPMENTAL INFORMATION

Is client currently in school/college/training program? ○ Yes ⊙ No

Name of school/college/training program:

Location of school (city)

Last grade completed: Bachelors/Higher

Was the client in special education classes? ○ Yes ⊙ No ○ Unknown

Describe school functioning:

He reports that he has a Bachelors in Music Studies, UB. He reports that he wanted to go back for an MBA and/or Music Education degree.

Can client read and write? ⊙ Yes ○ No ○ Unknown

Explain:

Does client have a history of developmental delay? ○ Yes ⊙ No

If yes, specify:

denies

VOCATIONAL INFORMATION

Current employment status Unable to Work, Mandated Tx

How long at current job?

○ 0-6 months ○ 6 months-1year ○ 1-5 years ○ 6-10 years ○ Over 10 years

Is client satisfied with current job? ○ Yes ○ No

Has client experienced difficulty performing work or work-like activity? ○ Yes ⊙ No

Describe the severity/frequency of work problems of any kind:

Work History

FINANCIAL STATUS

Source of income or support received during the past 12 months: Geico, mother

Does client have financial problems? ⊙ Yes ○ No

Explain:

Joseph reports that he is unable to work and/or touch the money that he has in the bank.

LEGAL HISTORY

Present Legal Involvement
Awaiting Trail

Past Legal Involvement
None

Reason for last incarceration, when and how long:

He reports that he was arrested on April 1st and was released on April 11th.

Is client presently awaiting charges, trial or sentence? ⊙ Yes ○ No

If yes to presently awaiting charges, trial or sentence, explain:

Joseph reports that he is awaiting a Federal Trial.

Last arrested for (offense): Date: April 1

Is client on probation? ⊙ Yes ○ No ○ Unknown

Is client on parol? ○ Yes ⊙ No

CLIENT STRENGTHS
Work History
Determined
Brave
Communicates Well

Describe any leisure activities or hobbies:

music, reading, video games, sports

Case Formulation:

(describe complete picture of client, how/why did illness develop, suggested treatment approach, rationale):

Joseph was referred by Kathleen Horvatits and is on Federal Probation. Due to client being pre-trial, his case was not discussed. He reports that he is not currently in a relationship and has fathered no children.

Joseph reports that he grew up with his mother and father and 2 brothers. He reports that his mother works and that his father is a stay at home dad. He reports that he has a good relationship with his mother and brothers and that his dad has depression and is physically and emotionally abusive. He reports that his younger childhood was good and that he had a lot of friends, but has developed social anxiety in regards to not being able to make and keep friends. He reports that he is close with his immediate family and very close with his grandma. He reports that his father is depressed and is verbally and physically abusive. He reports that his uncle Ronald was diagnosed with schizophrenia, his grandmother and aunt both depression. Grandmother, Uncle and Aunt have diabetes. Deceased grandmother had kidney failure.

Denies addictions, gambling history and disordered eating. We are unable to discuss sexual history at this time. He reports that his father is severely depressed and often physically, emotionally and verbally abusive.

He reports that he has a Bachelors in Music Studies, UB. He reports that he wanted to go back for an MBA and/or Music Education degree. He reports that he was working full time at Geico, but is taking a LOA due to his pending case. He reports no legal past, did not discuss current legal situation. Joseph reports that he was diagnosed with Narcolepsy after a misdiagnosis of Sleep Apnea. He reports no other medical issues.

Joseph reports that he has been experiencing anxiety since he can remember. He reports that he doesn't remember a time without anxiety. He reports that started experiencing panic attacks; having a heavy chest, uncontrollable crying, and hyperventilation. He reports that he experiences this every once in a while, randomly. He reports that he has a little bit of social anxiety. He reports that he can talk to people for a job, but when it comes to making friends, he reports, "I can't do it, I just don't have enough to talk about." He reports that he also pulls his hair and has done so since he was a teenager. He reports that he was diagnosed with Trichotillomania when he was a kid. "I feel like when I pull out my hair, I release pressure built up in my head, so the more stress i have, the

more pressure I feel, the more I pull my hair." He reports that he experienced extreme depression after a breakup after a breakup his freshman year and that he spent his entire freshman year crying every day, not eating and feeling extremely depressed. He reports that the only thing that brought him out of his depression was being successful in college in his music major. He reports that he is experiencing depression for a long time, since middle school. He reports that at the end of middle school he lost his best friend. He reports that his friend got really into drugs and he stopped talking to him after that. He reports that he was diagnosed with Narcolepsy and takes two medications for it. He reports that when he is not on his medication, he has difficulty sleeping, breathing when he's sleeping and focusing. "It's like you're running through a forest and every tree you pass is a new idea." He reports that he has attacks when he focuses too hard and is not on his medication. He reports that before he was medicated, he was hallucinating and seeing things. He reported that it got bad during college; "It got so bad that I didn't know what was real or what was not real. I would fall asleep, and I could hear people talking, but i didn't know what was being said." He denies auditory/visual hallucinations currently now that his disorder is under control. Joseph reports that the stress of the case and not being able to work or do anything is stressing him out and that he has been having random severe panic attacks and pulling his hair due to the extreme stress.
Joseph is appropriate for mental health services due to his diagnoses of Persistent Depressive Disorder, Trichotillomania and Generalized Anxiety Disorder. He reports that his symptoms have been interfering with his daily life for as long as he can remember. He will meet with his primary counselor 3x per month and attend Federal Stress Management Group 2x per month to work on his treatment plan goals and objectives. He will continue in treatment as long as his symptoms are causing him impairment.

Stage of Change: Preparation

Additional assessments/information needed:

If other assessment/information is needed, specify:

What are the client's goals and preferences for treatment? Will there be family involvement?

Joseph will attend Federal Stress Management group

Services:
Initial Evaluation
Medication Managment
Individual Therapy- Full
Group Therapy

Comments about Initial Plan for Services:

Joseph will attend individual sessions 3x per month and group therapy 2x per month in order to work on his treamtent plan goals and objectives.

Criteria for Discharge Planning:

Joseph will be discharged once he is charged/sentenced and/or once his symptoms are no longer causing him impairment.

Signature of Clinician Completing Assessment:

Name: RUDOLPH, ASHLEE, LMHC Date: 05/13/2016 Time: 3:43 p.m. Electronic
Electronically Signed

Administrative Sign-off (If needed):

Name: CICCARELLI, SAMANTHA Date: 05/15/2016 Time: 6:41 p.m. Electronic
Electronically Signed

Form WIZNYS07; Version 1.04; Created 06/08/09

Mid-Erie Counseling and Treatment Services

COMPREHENSIVE ASSESSMENT FOR ADULTS-ADDICTIONS

SUBSTANCE USE

Does client have any history of substance use? ○ Yes ◉ No

Drug Use History

Above information suggests need for further assessment regarding substance abuse/dependence? ○ Yes ◉ No

Rationale/ Findings to support CD diagnosis:

He reports that he drinks once in awhile. Denies any other drug use.

OTHER ADDICTIONS

GAMBLING

Any history of gambling? ○ Yes ◉ No
Describe:

denies

Indicative of a possible gambling problem? ○ Yes ◉ No

SEX

Any history of sexual acting out, pornography, sex crimes, etc.? ◉ Yes ○ No
Describe:

Pretrial charges, cannot discuss.

Indicative of a possible sex addiction? ○ Yes ◉ No

FOOD

Any history of overeating, restricting, or purging food? ○ Yes ◉ No
Describe:

denies

Indicative of an eating disorder? ○ Yes ◉ No

Mid-Erie Counseling and Treatment Services

COMPREHENSIVE ASSESSMENT FOR ADULTS- MEDICAL

MEDICAL INFORMATION

Has client taken any medications in the last two weeks? ⊙ Yes ○ No

Does client report taking any medications for any reason? ⊙ Yes ○ No

Medications History

List any other medications not included above:

Riddilin, Madofinil

Medical History
Other

Comments regarding medical history:

Joseph reports that he was diagnosed with Narcolepsy after a misdiagnosis of Sleep Apnea.

Date of last menstrual period: NA

Number of pregnancies: 0 Number of Live Births: 0

Birth Control? ○ Yes ⊙ No

Birth control method: NA

Any allergies or special precautions? ○ Yes ⊙ No

If yes, what are they:

none

Does client have any special nursing/medical needs? ○ Yes ⊙ No

If yes, specify:

Does the client experience limitations due to physical health or disability? ○ Yes ⊙ No

If yes, explain:

Name of personal physician: Phone Number:

Treating facility: Lifetime Health

Has contact been made with primary care physician in order to coordinate care?

○ Yes ○ No ○ Unknown ○ N/A

Signature of Clinician Completing Assessment:

Name: RUDOLPH, ASHLEE, LMHC Date: 05/13/2016 Time: 2:22 p.m. Electronic
Electronically Signed

Administrative Sign-off (if needed):

Name: Date: Time: N/A

Doctor's Signature

Name: Date: Time: N/A

Form MECATS11; Version 1.04; Created 06/08/09

Mid-Erie Counseling and Treatment Services

COMPREHENSIVE ASSESSMENT FOR ADULTS- FAMILY

FAMILY OF ORIGIN

Describe family constellation (primary caregivers, siblings, birth order):

Joseph reports that he grew up with his mother and father and 2 brothers. He reports that his mother works and that his father is a stay at home dad. He reports that he has a good relationship with his mother and brothers and that his dad has depression and is physically and emtionally abusive.

Describe childhood and adolescence (atmosphere, location, significant events):

He reports that his younger childhood was good and that he had a lot of friends, but has developed social anxiety in regards to not being able to make and keep friends.

Significant issues from childhood are impacting current presenting problem? ⊙ Yes ○ Denies

Describe how:

He reports that his experiences with his father have made him more negative and that she strives to be better because of it.

Describe which family members are living, where, contact, relationships:

He reports that he is close with his immediate family and very close with his grandma.

History of Mental Illness:
Biological Father
Aunt/ Uncle

If indicated above, describe illness (give diagnosis if known):

He reports that his father is depressed and is verbally and physically abusive. He reports that his uncle Ronald was diagnosed with schizophrenia, his grandmother and aunt both depression

History of Family Suicide:
None

History of Substance Abuse:
None

History of Criminal Activity:
None

History of Violent Behavior:
None

Name: KUROWSKI, JOSEPH	Case#: 24586	Page: 14 of 18
Type: Comprehensive Assessment Adult		Date: 05/13/2016
Printed on 09/13/2016 at 02:08 PM		(Final Approved on 05/15/2016 at 06:41 PM)

History of Medical Problems:
Diabetes

Explain any areas indicated above:

Grandmother, Uncle and Aunt have diabetes. Deceased grandmother had kidney failure.

Form MECATS10; Version 1.03; Created 02/10/10

RISK ASSESSMENT- C/A

Does client currently have thoughts of or plans to harm self or a history of such thoughts/plans: ◉ Yes ○ No
If yes, complete risk to self table:

Risk to Self:

Does client hear voices telling him/her to kill self: ○ Yes ◉ No
If yes, explain:

denies

Has client experienced the suicide of family member or friend: ◉ Yes ○ No

Does client engage in or have a history of self mutilation or other self destructive behaviors: ◉ Yes ○ No
If yes, explain:

He reports that he has hit himself in the past for being aggrivated or not being able to understand something.

Does client currently have thoughts of or plans to harm others or a history of such thoughts/plans: ○ Yes ◉ No
If yes, complete risk to others table.

Risk to Others:

Does client have access to weapons: ○ Yes ◉ No
If yes, explain:

denies

Does client have a history of setting fires: ○ Yes ◉ No
If yes, explain:

denies

Does client have thoughts or plans of setting fires: ○ Yes ◉ No
If yes, explain:

denies

Does client have fantasies/obsessive thoughts about others: ○ Yes ◉ No
If yes, explain:

He reports that he that he was extremely depressed about his breakup freshman year of college.

Does client have a history of stalking: ○ Yes ⊙ No

If yes, explain:

denies

OTHER FACTORS INCREASING RISK

Check all that apply:

- ☐ Abuses drugs and alcohol
- ☐ Poor impulse control
- ☒ Feelings of hopelessness
- ☐ Thought disturbance
- ☒ Disorganized thinking
- ☐ Current familial or interpersonal conflict
- ☐ Poor judgment
- ☐ Giving away belongings
- ☐ Social withdrawal
- ☐ Recent end of significant relationship
- ☐ History of property damage
- ☐ Fear inducing behaviors
- ☐ Non-compliance with critical medical care
- ☐ Recent diagnosis of Schizophrenia
- ☐ Terminal illness/chronic pain/chronic illness
- ☒ Victim of abuse
- ☐ Sexual excitation/gratification through inappropriate means
- ☐ History of harm to animals
- ☐ Employment problems/job loss
- ☒ Current legal problems
- ☐ Academic problems
- ☐ Poor insight
- ☐ Denial of mental illness
- ☐ Intellectual impairment
- ☒ Memory problem

Explain factors increasing risk:

Joseph reports being depressed and feeling hopeless. He reports racing thoughts and being a victim of verbal, and occasional physical abuse from his father. He is currently awaiting a federal trial and reports severe memory issues related to his Narcolepsy.

Factors reducing risk (Check all that apply):

- ☐ Compliant with treatment
- ☒ Compliant with medications
- ☐ Adaptive coping skills
- ☐ Has/uses strategies to cope with command hallucinations
- ☒ Insight into mental illness
- ☒ Employment or school stability
- ☒ Future oriented
- ☒ No history of violence
- ☐ No current substance abuse
- ☒ Family (significant other) support
- ☒ Acceptance of mental illness
- ☐ Social/peer support
- ☒ Religious beliefs
- ☐ Other

Explain factors or strengths reducing risk:

Joseph reports being compliant with his medication. He appears to have insight and acceptance of his mental health issues. He reports that he is looking forward to the future, has no history of violence and has support from his family. He reports that he has religious beleifs.

OTHER IMPORTANT INFORMATION, COMMENTS OR CONCERNS

RISK LEVEL

○ Elevated risk ⊙ Concern of risk ○ Low risk ○ Minimal risk

Elevated Risk=Immediate risk to self or others. Current and/or recent history of suicidal plans or behaviors, violence, threats, or similar acting-out behavior which may be associated with a disorganized mental state or substance abuse.

Concern of risk=Thoughts of harm, no plan. No recent history of elevated risk factors, yet does have a history of suicide attempts, violence, or threats which may be associates with psychosis or substance abuse, and/or moderate risk factors in current presentation.

Low risk=No past history of suicide attempts or violence, but clinical presentation contains some factors which might raise concern.

Minimal risk=No known risk factors for harm to self or others.

Describe:

Joseph is a concern of risk. He reports history of thoughts of harm, but no plans or attempts. Joseph reported that in the past, he used to think that if he was hurt in some way, that his family and/or girlfriend would pay attention to him. He reports that currently he has been having thoughts because he is very future oriented and that if he is going to have his future taken away from him, "to me, it's just not worth it. At that point, why bother. It's not that I want to commit suicide, but my life is over, so why bother."

RISK MANAGEMENT PLAN

Risk, Management Plan

- ☐ Hospitalize
- ☒ Contract for safety
- ☐ Notify potential victim
- ☐ Refer or provide services or treatment
- ☒ Notify Crisis Services
- ☐ Other
- ☒ Medication evaluation
- ☒ Notify police
- ☒ Notify family, significant others or guardian
- ☐ Consult with other professionals
- ☐ Detox

Describe:

Joseph completed a safety plan and was given the information for Crisis Services and the after hours phone. He is scheduled for medication evaluation with Dr. Samant for 7/6/16. He was educated on the limitations of confidentiality and reported that he understood.Joseph completed a safety plan and was given the information for Crisis Services and the after hours phone. He is scheduled for medication evaluation with Dr. Samant for 7/6/16. He was educated on the limitations of confidentiality and reported that he understood.

Signature of Staff Person Completing Form:

Name: RUDOLPH, ASHLEE, LMHC Date: 05/13/2016 Time: 3:28 p.m. Electronic
Electronically Signed

Signature of Supervisor:

Name: _____ Date: _____ Time: _____ N/A

Form MECATS04; Version 1.02; 08/18/13

Name: KUROWSKI, JOSEPH Case#: 24586 Page: 1 of 1
Type: Diagnosis Review (Active Diagnoses) Date: 05/13/2016
Printed on 09/13/2016 at 02:09 PM (Final Approved on 05/13/2016 at 03:42 PM)

Mid-Erie Counseling and Treatment Services

DIAGNOSTIC REVIEW

Disorders and Conditions

ID	Description	Priority	Begin Date	End Date
F34.1	Persistent depressive disorder (dyst	1	05/13/2016	
F63.3	Trichotillomania (hair-pulling disord	2	05/13/2016	
F41.1	Generalized anxiety disorder	3	05/13/2016	

Important Psychosocial and Contextual Factors

ID	Description	Priority	Begin Date	End Date
Z65.3	Problems related to other legal circ	1	05/13/2016	
Z91.89	Other personal risk factors	2	05/13/2016	

WHODAS 97

SPMI/SED SPMI/SED

Signature of clinician completing form:

Name: RUDOLPH, ASHLEE, LMHC Date: 05/13/2016 Time: 3:42 p.m. Electronic
Electronically Signed

Co-signature of clinician completing form (if different from above):

Name: Date: Time: N/A

Signature of staff entering information (if different from above):

Name: Date: Time: N/A

Form DSM5DIAG; Version 1.03

CLIENT MEDICATIONS

PAGE: 1

Client Name: KUROWSKI, JOSEPH 24586 Admitted **SA1:** RUDOLPH, ASHLEE
Print Date: 09/13/2016 **Time:** 14:26 **Included:** All medications, Discontinued, All medication types

---

Start Date: 06/01/2016 **End Date:** 07/30/2016
Recorded: 06/01/2016 **Presc/Order#:** 17345
Strength: 15 mg
Dose Form: tablet
Route: oral

Earliest Fill Date:
Type: Prescription
Pharmacy: RITE AID-476 WILLIAM ST
Pharmacy Addr: 476 WILLIAM STREET
Pharmacy City: BUFFALO
Pharmacy Phone: 716-847-0424

Estimated Dates: N
Medication: BuSpar Dividose

Sig: Take 1 tablet(s) by mouth 2 times a day

Note to Pharmacy:

Prescribing Physician:
Staff: SAMANT, ARVIND
Dispense Qty: 60 / Tablet(s) **Refills:** 1 ☐ Pre-Approved ☐ Discontinued ☐ Renewal ☐ Renewed ☐ Voided

---

Start Date: 06/01/2016 **End Date:** 07/30/2016
Recorded: 06/01/2016 **Presc/Order#:** 17346
Strength: 20 mg
Dose Form: capsule
Route: oral

Earliest Fill Date:
Type: Prescription
Pharmacy: RITE AID-476 WILLIAM ST
Pharmacy Addr: 476 WILLIAM STREET
Pharmacy City: BUFFALO
Pharmacy Phone: 716-847-0424

Estimated Dates: N
Medication: PROzac

Sig: Take 1 capsule(s) by mouth 1 time a day in the morning before noon

Note to Pharmacy:

Prescribing Physician:
Staff: SAMANT, ARVIND
Dispense Qty: 30 / Capsule(s) **Refills:** 1 ☐ Pre-Approved ☐ Discontinued ☐ Renewal ☐ Renewed ☐ Voided

---

Start Date: 08/31/2016 **End Date:** 10/29/2016
Recorded: 08/31/2016 **Presc/Order#:** 20964
Strength: 15 mg
Dose Form: tablet
Route: oral

Earliest Fill Date:
Type: Prescription
Pharmacy: RITE AID-476 WILLIAM ST
Pharmacy Addr: 476 WILLIAM STREET
Pharmacy City: BUFFALO
Pharmacy Phone: 716-847-0424

Estimated Dates: N
Medication: BuSpar Dividose

Sig: Take 1 tablet(s) by mouth 2 times a day

Note to Pharmacy:

Prescribing Physician:
Staff: SAMANT, ARVIND
Dispense Qty: 60 / Tablet(s) **Refills:** 1 ☐ Pre-Approved ☐ Discontinued ☐ Renewal ☐ Renewed ☐ Voided

---

Start Date: 08/31/2016 **End Date:** 10/29/2016
Recorded: 08/31/2016 **Presc/Order#:** 20965
Strength: 20 mg
Dose Form: capsule
Route: oral

Earliest Fill Date:
Type: Prescription
Pharmacy: RITE AID-476 WILLIAM ST
Pharmacy Addr: 476 WILLIAM STREET
Pharmacy City: BUFFALO
Pharmacy Phone: 716-847-0424

Estimated Dates: N
Medication: PROzac

Sig: Take 1 capsule(s) by mouth 1 time a day

Note to Pharmacy:

Prescribing Physician:
Staff: SAMANT, ARVIND
Dispense Qty: 30 / Capsule(s) **Refills:** 1 ☐ Pre-Approved ☐ Discontinued ☐ Renewal ☐ Renewed ☐ Voided

Maureen Graham PMHNP-BC
Psychiatric Mental Health Nurse Practitioner
651 Delaware Ave. Suite 201
Buffalo, NY 14202
(716) 362-1210

Date: July 19, 2016

Patient: Joseph Kurowski
DOB: 1/19/1993

PSYCHIATRIC EVALUATION:
REASON FOR EVALUATION: Patient comes to today's appointment stating he would like to have a second opinion. He sees Dr. Samat at Mid Erie on Broadway
Source of Information: Patient. The only collateral available at today's appointment is from Ashlee Rudolph: patient's therapist.
PCP: Patient is not able to recall the name of his PCP who is at Lifetime Health in Hamburg (last visit Feb)
Today's Weight: 202 lbs

Time spent face to face: 0830-0930 and 10:30-1115

Review of Ashlee Rudolph's notes from 5/13/16: "Joseph was referred by Kathleen Horvatis and is on Federal Probation"

CHIEF COMPLAINT: "I need a second opinion"

HPI: 23 yo single male with a history of depression, anxiety and narcolepsy comes to psychiatric appointment for a second opinion. Dr. Weinstein was present for the interview.

Patient tells writer he is currently pretrial for charges, is wearing an ankle bracelet, is not allowed to use a cell phone or the internet or leave his home. He has a probation officer he has to notify when he leaves his house for appointments. He tells writer that he is innocent of charges.

Patient is very anxious during the interview and has difficulty describing details in a linear fashion. He talks about having a history of trichotillomania (hair pulling) as a way to relieve anxiety. When asked specific questions: he would derail from the conversation and give attention to details that were not important. Because he could not answer questions regarding depression and anxiety without derailing from the conversation; the Generalized Anxiety Disorder 7-item scale GAD 7 and the Patient Health Questionaire (depression screen) PHQ9 were administered to help him answer questions about anxiety and depression.

GAD-7 revealed the highest score for anxiety. He reported feeling nervous, anxious on edge. He reported not being able to stop or control worry and worrying too much about different things. He reported difficulty relaxing, feeling restless, easily annoyed and irritable and fearful that bad things might happen. He scored 21/21. Revealing high level of anxiety.

He scored 11/27 on the PHQ 9 revealing mild to moderate amount of depression. The highest score being feeling bad about himself, that he is a failure, feels he has let himself and his family down. (Favors adjustment disorder). He also complained of having difficulty falling asleep,

lacking energy more than 50% of the time. He complained of low levels of anhedonia, feeling down, difficulty concentrating and some thoughts that he might be better off dead. He denied any active suicidal thoughts, plans or intent. He denied any homicidal ideation. He denied current auditory or visual hallucinations.

Depression: first episode sophomore yr of HS. Friend consumed with a band and got into drugs and alcohol and his group of friends broke up. This was painful and he felt alone because his group of friends was gone. (Age 14-16). Junior year dated a girl for 2 yrs. His girlfriend lived stayed with them on weekends and vacation. First week of college his girlfriend broke up with him.

He describes feeling better when he has friends however his aunt told him he still looked depressed when he was dating a girl prior to college. This girl broke up with him within the first week of college and he stated he was very depressed about it.

During his sophomore and Jr yr. of college had friends and felt better. Senior year he lost friends due to friends graduating and other friends having different schedules. He tried to connect with friends by starting game nights and stated that no one would come to his game nights. He felt alone. He attributes being alone to feeling depressed. He hates himself for not being social. He states he has low self-esteem and has self-hatred. His claims that his father has always called him a liar and talks down to him and puts others down.

OCD symptoms: He described that he couldn't find a board game at home and spent 1.5 hrs looking for it. It bothered him and days later he went through the house again and when he found it, felt relieved. Everything has to be in its place. He does not endorse electronic addiction.

Prior to arrest in April he described situational depression. He was able to enjoy his job, however became depressed when he came home from work.

He claims to have been having nightmares of getting arrested and states he no longer feels safe anywhere at all. Feels like "everyone is out to get me"
Social Anxiety: doesn't like going out in public. If he knows the setting and the people: he states that he has no difficulty. He describes that in new situations that he becomes very anxious and quiet. He states that in new situations that he experiences nausea and loose stools.

If he has a best friend: does not have symptoms of social anxiety with that relationship. If he goes to a social situation: severe anxiety if he does something by himself. This began after high school.

Denies any history of addiction or gambling. Denies looking at child pornography. Denies any history of sexual offense. He is heterosexual and denies any history of soliciting sex.

Sleep: history of sleep problems: Narcolepsy. Now takes modafinil. Now: Has trouble falling asleep. 11pm -2 can be lying awake. We discussed sleep hygiene.
Depression: 6-7/10 (10=worst)
Please see GAD 7 and PHQ 9 as patient had difficulty quantifying symptoms.

Prior to taking narcolepsy medication: saw a deer in the road and swerved. The deer was not actually not there. Saw shadows out of the corner of his eyes. This was attributed to narcolepsy.

Recently has seen aunts crawling. He goes to kill it and it is gone. This started in April since he was arrested. He felt like an aunt was crawling on him for 1-2 hours approx. one week ago. Started with a feeling in his foot, and then moved to different parts of his body.

History of thinking there is something wrong with him. Can't seem to do anything right. Couldn't get up in the morning.

Guilt: mild
Energy: fair
Concentration: fair
Appetite: good
Psychomotor slowing: denies
Suicide: Denies

He denies history of symptoms of mania or violence.

PAST PSYCHIATRIC HISTORY:
Inpatient: Denies history

Outpt: Started going to Mid Erie this past May and sees Ashlee Rudolph LMHC; Psychiatrist Dr. Samat in June
Denies history of Suicide Attempt
Denies history of homicide attempt
Denies self-harm, cutting or stitches
Denies history of overdose
Eating disorder: Stopped eating for 2 months when he started college: GF broke up with him the first week of school (grieving). The emotional grief lasted one yr.
Denies any history of sexual abuse
Emotional and physical abuse from Father.
Family history of mental illness: Father: depression; MGM: depression; maternal aunt: depression; Paternal uncle: Schizophrenia diagnosed at age 19. No history of suicide attempts in the family
Psychiatric Medication History: denies

Current Psychotropic Medications: Takes Modafinil as prescribed by DENT Neurology for Narcolepsy. Also has methylphenidate prn ordered per his report
He tells writer that two medications were prescribed by Dr. Samat and he has not picked them up. Loxapine and buspirone which he has not taken

Current medications: Denies; PRN ibuprofen

Past Medical History
Operations: wisdom teeth extracted age 14; Lasik eye surgery earlier this year
Denies history of any Fractures
Denies history of any Tuberculosis
Denies history of any head injury or coma

Seizure: States he was told at DENT that he had night seizures that stopped
Denies history of any STD
Chronic Medical Problems: NARCOLEPSY, sleep study: was ordered for BiPap and not able to keep it on at night; Denies any history of Diabetes, HTN, Asthma etc.
Allergies: No Known Drug Allergies

ETOH: Started using ETOH at age: 21; rarely uses alcohol; denies history of problematic use.
Last use: February (one glass of wine with dinner at a friend's house)
Denies history of Black outs, Auditory Hallucinations, Seizure related to ETOH use.
Denies ever going into Detox; Rehab; AA; Denies history of DWI

Drugs: Denies history or current use of: THC, heroin, cocaine, uppers, downers, LSD, PCP, SK, ecstasy, magic mushrooms, hashish or pain pills
Denies history of inpatient or outpatient rehabilitation

Nicotine: Denies any history or current use
Caffeine: none
Pretrial for legal charges; currently on parole and is wearing an ankle bracelet: no cell phone, no internet, not allowed to walk outside.

Parole Officer Kathleen Horvatis 704-6089 (Buffalo): Dr. Weinstein called her office after patient signed a consent and she has not returned the call.

Military: denies
Social History: Born in Buffalo, Grew up in Cheektowaga. Parents are together. Father was a stay at home dad since he was born. His mother is an Associate Athletic Director at UB. He is the oldest of three children. He has a 15 yo brother and 11 yo brother. Denies any history of legal trouble prior to April. He states that he did well in high school. Graduated from JFK in Cheektowaga. Bachelors of Arts and Music from Univ. of Bflo. He prepared for a senior recital. He wanted to take a year to prepare for Music Ed school. (Voice major). He worked at Geico started June 2015. He is LOA since April until legal process is finished.

Review of systems: Denies any physical complaints, denies headache, SOB, musculoskeletal pain, nausea, chest pain or back pain.

Mental Status Exam:

Orientation: ☒Person ☒Place ☒Time

Appearance: ☒Well Groomed ☐Disheveled ☐Poor Hygiene ☐Bizarre

Eye Contact: ☒Direct ☐Indirect ☐None

Mood: ☐Euthymic ☐depressed ☒ anxious ☐ apathetic ☐ irritable ☐ambivalent ☐ agitated ☐ elevated ☐expansion ☐ tension ☐grief/mourning ☐euphoric ☐dysphoric ☐ panic

Affect: ☒Appropriate ☐Blunted ☐Flat ☐Constricted ☐Expansive ☐Labile

Speech: Rate: ☐Normal ☐Slow ☒Rapid ☐Pressured ☐Mute ☐Other
Tone: ☒Normal ☐Low ☐Inaudible ☐Loud ☐Monotone ☐Other
Amount: ☒Normal ☐Poverty of speech ☐Over-productive ☐Other
Clarity: ☒Normal ☐Unintelligible ☐Slurred ☐Mumbling ☐Other
Fluency: ☒Spontaneous ☐Delayed ☐Other

Thought Process: ☐Logical ☐Linear ☐Goal directed ☐Circumstantial ☐Flight of ideas ☐Neologisms ☐Loose associations ☐Tangential ☐Word salad ☐Perseveration ☐Thought blocking ☐Unable to assess ☐Other

Thought Content: Suicidal ideation: ☒ Denies ☐Thought ☐Plan ☐Intent ☐Homicidal ideation: ☒Denies

Delusions: ☐Yes ☐ No If Yes: ☐Referential ☐Nihilistic ☐Somatic ☐Erotomanic ☐Paranoid ☐Grandiose ☒Other: none evident at this time

Perceptions: ☐Normal ☐Auditory hallucinations ☐Visual hallucinations ☐Olfactory hallucinations ☒Tactile hallucinations ☐Somatic delusions ☐Gustatory hallucinations ☐Derealization ☐Unable to assess ☐Other

Concentration ☐Good ☒Fair ☐Poor

Insight: ☐Good ☒Fair ☐Poor ☐Inadequate

Judgment: ☐ Good ☒ Fair ☐ Poor ☐Inadequate

Formulation: 23 yo male with a history of low self-esteem, anxiety and poor self-image comes to psychiatric appointment for a second opinion. Patient has a family history of mental illness and is biologically predisposed to experiencing anxiety. He describes a difficult relationship with his father and difficulty making and keeping friends. He becomes distraught when relationships are broken or if he is by himself. This favors a personality disorder that is best treated using therapy. He also describes overwhelming anxiety that will require both therapy and medication management.

This young man craves human relationships and lacks skills to maintain the relationships. This is best managed in therapy. He claims to feel better when he is engaged with others and does not enjoy being alone and attributes this to feeling depressed. (adjustment disorder).

Patient's answers to my questions were vague and circumferential. He had great difficulty answering my questions in a logical and linear manner. He gave similar answers to my questions that he gave to his therapist.

Regarding seeing things that are not there: this will warrant further ongoing assessment by his psychiatrist and therapist as it is not typical for what would be expected of patients with psychosis.

Of note: modafnil could be possibly contributing to his level of anxiety.

DIAGNOSTIC IMPRESSION:

AXIS I: Generalized anxiety disorder; Depression NOS; Adjustment disorder with mixed emotions. OCD traits
NARCOLEPSY treated at DENT Neurology
Personality disorder Not otherwise specified.

Plan:

1. Continue psychotherapy as this will be the mainstay of treatment for him.
2. Anxiety- particularly GAD is treated with SSRI or SNRI
3. Depression is situational (treatment for depression is also using SSRI or SNRI)
4. It is not clear if he is experiencing psychosis or somatic symptoms from stress of going through pretrial. This warrants further assessment.
5. Recommend head imaging if neurologist is in agreement
6. There is no need for patient to return as this was a second opinion.

Maureen Graham NP
Maureen Graham PMHNP-BC

Wendy Weinstein MD

☐ 1526 Walden Avenue, Ste 400
Cheektowaga, NY 14225
Main Office 716 895-6700
Fax 716 895-0436
Administration 716 895-7167
Fax 716 332-4488

☒ 1131 Broadway
Buffalo, NY 14212
716 896-7350
Fax 716 896-7717

☐ 5360 Genesee St., Ste 200
Bowmansville, NY 14026
716 681-5077
Fax 716-681-5079

☐ 463 William Street
Buffalo, NY 14204
716 893-0062
Fax 716 893-0070

☐ 431 William Street
Buffalo, NY 14204
716 249-5166
Fax 716 855-4684

Counseling & Treatment Services

Elizabeth L. Mauro, LCSW-R
Executive Director

Date: 2/23/17

Re: Joseph Kurowski

D.O.B: 1/19/1993

Dear Mr. LoTempio:

This letter serves as an updated progress report for the above mentioned client. Joseph engaged in a Mental Health evaluation on 5/13/16 and was admitted for treatment by Ashlee Rudolph, LMHC at Mid-Erie Counseling and Treatment Services. He was cooperative with the evaluation and admission process. Joseph reported being under U.S. Federal Probation's supervision due to a charge of Possession and Receipt of Child Pornography was required to engage in pretrial services (mental health and stress management) with Mid-Erie.

Joseph continues to meet the diagnostic criteria for Persistent Depressive Disorder (Dysthymia) (F34.1), Generalized Anxiety Disorder (F41.1), and Trichotillomania (F63.3). Joseph also reported that he was also diagnosed with Narcolepsy, for which he takes medication, prescribed by Dr. Frost at DENT Neurology. He reported that he has had feelings of anxiety, which are especially prevalent in social situations, since he was a child and reports experiencing panic attacks, trouble sleeping and visual hallucinations. However, the visual hallucinations were not ruled out to be a side effect of his Narcolepsy or any other medication that he was taking. Joseph stated that his hair-pulling behaviors worsen when he feels extremely stressed or his high anxiety. Joseph reports that he has been feeling depressed since he was in college, and reports that it stems from separating from his significant other. Joseph continues to deny alcohol use, drug use and gambling behavior. Joseph reports having family and friends as a support system and reports that he utilizes their company and help often.

☐ 1526 Walden Avenue, Ste 400
Cheektowaga, NY 14225
Main Office 716 895-6700
Fax 716 895-0436
Administration 716 895-7167
Fax 716 332-4488

☒ 1131 Broadway
Buffalo, NY 14212
716 896-7350
Fax 716 896-7717

☐ 5360 Genesee St., Ste 200
Bowmansville, NY 14026
716 681-5077
Fax 716-681-5079

☐ 463 William Street
Buffalo, NY 14204
716 893-0062
Fax 716 893-0070

☐ 431 William Street
Buffalo, NY 14204
716 249-5166
Fax 716 855-4684

Counseling & Treatment Services

Elizabeth L. Mauro, LCSW-R
Executive Director

Since being admitted for treatment in May of 2016, Joseph has been seen 1-3 times per month for individual sessions and twice per month for group therapy sessions with other men who are also on U.S. Federal Probation. Joseph's individual sessions continue to remain focused largely on coping with his depression and anxiety. He has been working toward developing coping skills that he can utilize to help him handle his symptoms more effectively. Joseph continues to remain on the agency's "high risk" list due to fairly recent direct and indirect mention of suicide. On more than one occasion, Joseph has discussed having past and recent suicidal thoughts and has stated that he would kill himself before going to prison. Despite this language and the statements he has made, he continues to deny lethality. However, due to his risk, this writer has been in constant communication with Joseph's U.S. Federal Probation officer, routinely assesses his risk during individual sessions, and is working with him toward decreasing suicidal thoughts/ideations. Joseph reported that he understands the limitations of confidentiality and completed a safety plan that he can utilize if he is having feelings/thoughts of self-harm.

In regard to Joseph's mental health, he remains committed to treatment, to exploring his thoughts, emotions and behaviors and reports that he has been medication-compliant with his primary care doctor. Joseph appears to have a clear understanding of how mental health counseling works and continues to have a positive and collaborative therapeutic relationship with this writer. Joseph reports that he is unsure about how well his medication is working, but that his friends and family have "noticed a difference." This writer has noticed a marked improvement in Joseph's baseline functioning and how he manages stress and anxiety. Previously, Joseph exhibited "all or nothing" thinking and the inability to see the positive in any situation and has been working toward decreasing his negative emotions and increasing his self-esteem. He appears to have made improvements in that area and is able to look at his situation, and any other stressful situation, logically in order to make an informed decision on how to think/feel and what to do in response. He continues to explore his anxiety, depression and day to day stress while attempting to find new and effective ways to cope with them. While in individual and group sessions, Joseph works hard to understand his thought and feeling

☐ 1526 Walden Avenue, Ste 400
Cheektowaga, NY 14225
Main Office 716 895-6700 Fax 716 895-0436
Administration 716 895-7167 Fax 716 332-4488

☒ 1131 Broadway
Buffalo, NY 14212
716 896-7350
Fax 716 896-7717

☐ 5360 Genesee St., Ste 200
Bowmansville, NY 14026
716 681-5077
Fax 716-681-5079

☐ 463 William Street
Buffalo, NY 14204
716 893-0062
Fax 716 893-0070

☐ 431 William Street
Buffalo, NY 14204
716 249-5166
Fax 716 855-4684

Counseling & Treatment Services

Elizabeth L. Mauro, LCSW-R
Executive Director

processes and brainstorms ways to making positive changes in the areas in which he needs improvement.

Joseph will continue to remain medication-compliant with his primary care physician and will continue to engage in two individual sessions and two group therapy sessions per month in which he will continue to explore his symptoms and work toward improving them. If you have any questions, please feel free to call me at (716)896-7350.

Sincerely,

Ashlee Rudolph

Ashlee Rudolph, LMHC

1131 Broadway
Buffalo, NY 14212
716-896-7350 Ext 2209

Alere™ Toxicology

ORAL FLUID INITIAL DRUG SCREEN RESULT FORM

Specimen ID Number 0127468

STEP 1: COMPLETED BY COLLECTOR OR EMPLOYER REPRESENTATIVE

COLLECTION SITE / COMPANY NAME: OTD

NAME: Joseph Kurowski

ADDRESS: 233 Bright Street SUITE:

CITY: Buffalo STATE: NY POSTAL CODE: 14206

PHONE: 716-891-9347 FAX:

DONOR SSN, DRIVER'S LICENSE or EMPLOYEE I.D. NO.: 627116827 ID VERIFIED BY: PHOTO ID ☐ EMPLOYER REP. ☐

DONOR NAME: Last: Kurowski First: Joseph

REASON FOR TEST: Pre-Employment X ☐ Random ☐ Reasonable Suspicion / Cause ☐ Post Accident ☐ Return to Duty ☐ Follow Up ☐ Other ☐

COLLECTOR NAME (PRINT)

Collector Phone No. ( )

Collector Fax No. ( )

TO BE COMPLETED BY COLLECTOR

STEP 2: COMPLETED BY DONOR

DONOR CONSENT: *I certify that I provided my specimen to the collector, that the specimen container was sealed with a tamper proof seal in my presence and that the information provided on this form and on the label affixed to the specimen container is correct. I hereby give permission for the release of the results of these tests to the health care provider. In the case of screening for employment or pre-employment, I also authorize release of the results of these tests to my employer or prospective employer and / or their authorized health care provider.*

X Joseph Kurowski (Signature of Donor) (Print) Donor's Name (First, MI, Last) Joseph Kurowski 08/30/2016 Date (Mo/Day/Yr)

Daytime Phone: 716-891-9347 Evening Phone: Date of Birth: 01/19/1993 Date (Mo/Day/Yr)

TO BE COMPLETED BY DONOR

STEP 3: COMPLETED BY COLLECTOR — INITIAL TEST RESULTS

ON-SITE SCREENING DEVICE — preliminary results

Catalog #:

Lot #:

Exp. Date:

DRUG NAME	NEG.	PRESUMPTIVE POSITIVE	NOT TESTED
Amphetamine (AMP)	[ ]	[ ]	[ ]
Benzodiazepines (BZO)	[ ]	[ ]	[ ]
Cocaine (COC)	[ ]	[ ]	[ ]
Marijuana (THC)	[ ]	[ ]	[ ]
Methamphetamine (mAMP)	[ ]	[ ]	[ ]
Opiate (OPI)	[ ]	[ ]	[ ]
Phencyclidine (PCP)	[ ]	[ ]	[ ]
Other	[ ]	[ ]	[ ]
Other	[ ]	[ ]	[ ]
Other	[ ]	[ ]	[ ]
ALCOHOL SCREEN (If Performed)			
Results	[ ]	[ ]	[ ]

Screen performed by: *(If different than collector)*

X Date:

Remarks:

PRESS HARD - YOU ARE MAKING MULTIPLE COPIES

STEP 4: COLLECTOR CERTIFICATION

COLLECTOR CERTIFICATION: *I certify that the specimen given to me by the donor identified above was collected, labeled, sealed & released as noted in accordance with applicable requirements.*

X Signature of Collector 11:45 Am Time of Collection

X Jennifer Henry (Print) Collector's Name (First, MI, Last) 08-30-2016 Date (Mo/Day/Yr)

YELLOW COPY FOR EMPLOYEE FILE

PN: 2390

AMERICAN JOURNAL OF
Preventive Medicine

RESEARCH ARTICLE

Social Media Use and Perceived Social Isolation Among Young Adults in the U.S.

Brian A. Primack, MD, PhD,[1,2,3] Ariel Shensa, MA,[1,2] Jaime E. Sidani, PhD, MPH,[1,2] Erin O. Whaite, BS,[1,4] Liu yi Lin, MD,[1,5] Daniel Rosen, PhD,[1,6] Jason B. Colditz, MEd,[1,2] Ana Radovic, MD, MSc,[1,3] Elizabeth Miller, MD, PhD[1,3]

Introduction: Perceived social isolation (PSI) is associated with substantial morbidity and mortality. Social media platforms, commonly used by young adults, may offer an opportunity to ameliorate social isolation. This study assessed associations between social media use (SMU) and PSI among U.S. young adults.

Methods: Participants were a nationally representative sample of 1,787 U.S. adults aged 19–32 years. They were recruited in October–November 2014 for a cross-sectional survey using a sampling frame that represented 97% of the U.S. population. SMU was assessed using both time and frequency associated with use of 11 social media platforms, including Facebook, Twitter, Google+, YouTube, LinkedIn, Instagram, Pinterest, Tumblr, Vine, Snapchat, and Reddit. PSI was measured using the Patient-Reported Outcomes Measurement Information System scale. In 2015, ordered logistic regression was used to assess associations between SMU and SI while controlling for eight covariates.

Results: In fully adjusted multivariable models that included survey weights, compared with those in the lowest quartile for SMU time, participants in the highest quartile had twice the odds of having greater PSI (AOR=2.0, 95% CI=1.4, 2.8). Similarly, compared with those in the lowest quartile, those in the highest quartile of SMU frequency had more than three times the odds of having greater PSI (AOR=3.4, 95% CI=2.3, 5.1). Associations were linear ($p<0.001$ for all), and results were robust to all sensitivity analyses.

Conclusions: Young adults with high SMU seem to feel more socially isolated than their counterparts with lower SMU. Future research should focus on determining directionality and elucidating reasons for these associations.

Am J Prev Med 2017;■(4):■■■–■■■.

INTRODUCTION

Social isolation, a state in which an individual lacks a sense of social belonging, true engagement with others, and fulfilling relationships,[1] is associated with increased morbidity and mortality.[2] For example, social isolation has been compared to obesity in terms of potential association with negative health effects.[3] Social isolation also is known to be associated with unnatural increases in cortisol patterns, and these aberrant patterns can disrupt sleep, immune function, and cognition.[2,4] Social isolation also affects gene expression, negatively impacting vascular and mental health.[5,6] In view of these underlying mechanisms, it is not surprising that social isolation can substantially increase the risk for all-cause mortality.[7]

The construct of social isolation includes both objective social isolation—the actual lack of social ties—and subjective social isolation—the feeling of a lack of

From the [1]Center for Research on Media, Technology, and Health, University of Pittsburgh, Pittsburgh, Pennsylvania; [2]Division of General Internal Medicine, Department of Medicine, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania; [3]Division of Adolescent Medicine, Department of Pediatrics, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania; [4]University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania; [5]UPMC McKeesport Family Medicine and Psychiatry Residency Program, Pittsburgh, Pennsylvania; and [6]School of Social Work, University of Pittsburgh, Pittsburgh, Pennsylvania

Address correspondence to: Brian A. Primack, MD, PhD, 230 McKee Place, Suite 600, Pittsburgh PA 15213. E-mail: bprimack@pitt.edu.

0749-3797/$36.00
http://dx.doi.org/10.1016/j.amepre.2017.01.010

engagement with others.[3] These facets of social isolation are related but not the same: One may be objectively isolated but not feel a sense of loneliness, and one may be objectively connected to others but still feel lonely.[3] This study focused on subjective social isolation, or perceived social isolation (PSI). This is because the perception of being socially isolated and lonely—and not merely the objective lack of social connection—has been particularly linked to both mental and physical conditions.[2,4,8,9] The perception of loneliness seems to be linked to poor health outcomes based on both genetic predisposition and epigenetic factors.[10]

Recent increases in social media use (SMU) via platforms such as Facebook may provide opportunities for alleviation of PSI. For example, if people feel isolated because of their physical environment, they may be able to access supportive networks online. Similarly, SMU may facilitate forming connections among people by increasing social support.[11,12] For example, they may help individuals with rare or stigmatizing conditions form support systems that would otherwise be difficult to establish. SMU has increased in particular among young adults, who are navigating critical stages of social identity formation.[13] As many as 90% of young adults in the U.S. use social media, and the majority of users visit these sites at least once a day.[14]

However, it may be that SMU in this population counterintuitively increases PSI. For example, frequent users may substitute SMU for face-to-face social interactions. Similarly, frequent exposure to highly distilled, unrealistic portrayals on social media may give people the impression that others are living happier, more connected lives, and this may make users feel more socially isolated in comparison.[15] In empirical studies, SMU has been associated with constructs such as depression.[16–19] To the authors' knowledge, however, the association between SMU and PSI has not been assessed in a large-scale study.

Therefore, the aim of this study was to assess associations between SMU and PSI in a nationally representative sample of U.S. young adults. The focus on young adults was appropriate because of the particular increase in SMU in this population.[14] Additionally, PSI often begins during emerging adulthood, when people leave structured environments such as school or home of origin.[20] Because of the seeming strength of SMU to provide social support, the hypothesis was that increased SMU would be associated with lower PSI.

METHODS

Study Sample

A nationally representative sample of U.S. adults aged 19–32 years was surveyed regarding SMU and PSI. The sample was drawn from a research panel maintained by Growth from Knowledge (GfK), which recruited participants via random-digit dialing and address-based sampling.[21] Using this process, they maintained a sampling frame including >97% of the U.S. population.[21] GfK's sampling strategy has been shown to be a statistically valid method for assessing a nationally representative sample.[22,23]

From October 2014 to November 2014, the web-based survey was sent via e-mail to a random sample of 3,048 non-institutionalized adults aged 19–32 years who had consented to participate in a previous study wave that held no criteria except that participants had to be aged 18–30 years at baseline. The current data were collected during the 18-month follow-up of the prior study; only the 18-month follow-up data were used because the social media items were not asked at baseline. Responses were received from 1,787 participants (59%). This represented a strong response rate, because many of the baseline respondents were likely no longer in the GfK panel, which turns over participants every 2 years to prevent cohorts from becoming fatigued by surveys. Additionally, survey weights accounted for non-response and there were no demographic differences between responders and non-responders, both of which attest to external generalizability of the results.

Multiple strategies were instituted by GfK to improve data quality, such as minimizing survey length, reducing the need for scrolling, and avoiding the use of long grids. If individuals did not answer a question, they were prompted once to answer with the statement "Your answer is important to us. Please put your best guess." However, participants were not forced to answer any items.

The median time for survey completion was 20 minutes, and participants received $15 for their participation. This study was approved by the University of Pittsburgh IRB and was granted a Certificate of Confidentiality from NIH.

Measures

Participants completed online survey items including measures of PSI (dependent variable), SMU (independent variable), and covariates.

PSI was assessed using a four-item scale developed by the Patient-Reported Outcomes Measurement Information System (PROMIS). PROMIS is an NIH Roadmap initiative that aims to provide precise, valid, reliable, and standardized questionnaires measuring patient-reported outcomes across the domains of physical, mental, and social health.[24] The PROMIS social isolation scale was developed using item response theory to promote precision and decrease respondent burden.[25–27] Additionally, the PROMIS social isolation scale has been correlated with and validated against other commonly used social isolation measures.[28,29] The social isolation scale assesses perceptions of being avoided, excluded, detached, disconnected from, or unknown by others. The specific items ask participants how frequently in the past 7 days they had felt: *I feel left out*; *I feel that people barely know me*; *I feel isolated from others*; and *I feel that people are around me but not with me*. These items were scored on a 5-point Likert scale ranging from 1 to 5, corresponding to responses of *never*, *rarely*, *sometimes*, *often*, and *always*. Thus, with four items, each scored from 1 to 5, raw scores for PSI ranged from 4 to 20. Though PROMIS refers to the scale as assessing overall social isolation, it is clear from the structure of the items and their openings

I feel … that the primary construct assessed by the scale is perceived (i.e., not objective) social isolation.

The continuous PSI data were non-normal and not amenable to transformation into normally distributed data. Therefore, raw scores were collapsed into tertiles of "low," "medium," and "high" for analysis. This was appropriate because one of the specific aims of the PROMIS social isolation scale is to grade its severity instead of merely providing a dichotomous cut off. Similarly, because there is no established clinical cut off for social isolation, groups were divided into approximate tertiles using the appropriate function in Stata, version 13.1, rather than basing the categories on specific numbers. Thus, all participants were categorized as having low, medium, or high social isolation, which represented 39%, 31%, and 30% of the sample, respectively. Low, medium, and high social isolation corresponded to raw scores of 4–6, 7–10, and ≥11, respectively. The scale exhibited excellent internal consistency reliability (Cronbach's α, 0.92).

Participants' SMU was assessed in two complementary ways: time and frequency of use. First, participants were asked to estimate time spent on social media for personal use. This item specifically instructed participants not to count any time spent on social media for work. Participants provided estimates in numerical fields for hours and minutes on an average day. Second, participants were asked to report frequency of their use of each of 11 widely used social media platforms, including Facebook, Twitter, Google+, YouTube, LinkedIn, Instagram, Pinterest, Tumblr, Vine, Snapchat, and Reddit.[14,30] Seven response choices ranged from *I do not use this platform* to *I use this platform 5 or more times a day*. These items were based on the measures used by Pew Internet Research.[14] Using weighted averages based on the frequency responses, social media site visits per week were computed. To improve interpretability of results, all independent variables were collapsed into quartiles for primary analyses. To ensure robustness of results, all analyses were also conducted with independent variables as continuous.

For analysis, the sample was divided into three age groups based on the distribution of data. Race/ethnicity were grouped into five mutually exclusive categories. Other environmental and personal factors that may affect SMU and PSI were also assessed; these factors included relationship status, living situation, household income, and education level.[14,31]

Statistical Analysis

All participants who had complete data on the PROMIS social isolation scale and the social media items were included. Because only about 1% of participants had missing data for these variables, this did not affect results. Percentages were computed for the dependent variable, the two independent variables (time and frequency of SMU), and the seven covariates. Next, chi-square tests were used to determine bivariable associations between each of the independent variables and covariates and PSI.

After confirming that the proportional odds assumption was met, ordered logistic regression was used to examine associations between each social media variable and PSI. All covariates were included in primary multivariable models. To take advantage of the nationally representative data, all primary analyses were conducted using survey weights that took into account sex, age, race/ethnicity, education, household income, Census region, metropolitan area, and Internet access. Similar regression analyses examined whether there was an overall linear trend between each ordered categorical independent variable and the dependent variable.

Three sets of sensitivity analyses were also conducted to examine the robustness of results. First, all analyses were repeated with independent variables as continuous instead of ordered categorical. Second, all analyses were conducted using only covariates that had a bivariable association of $p<0.15$ with the outcome. Third, all analyses were conducted without survey weights. Results from all sensitivity analyses showed similar levels of significance and magnitude to the primary analyses described here.

Statistical analyses were performed in 2015 with Stata, version 13.1, and two-tailed p-values <0.05 were considered significant.

RESULTS

A total of 1,787 participants completed the questionnaire. The weighted sample was 50.3% female, 57.5% white, 13.0% African American, 20.6% Hispanic, and 8.9% biracial/multiracial or other. Of these, slightly more than half (55.6%) were in a committed relationship and approximately a third (35.6%) reported living with a significant other. In terms of household income, 22.9% were in the "low" category (<$30,000) and 38.7% were in the "high" category (≥$75,000). About one third (36.0%) of participants had not attended any college, whereas a quarter (25.7%) had a BA or higher (Table 1). There were no differences between responders and non-responders in terms of age (p=0.12); sex (p=0.07); or race (p=0.21).

Accounting for survey weights, PSI was classified as low, medium, and high among 42%, 31%, and 27% of participants, respectively. Median total time on social media was 61 minutes per day (interquartile range, 30–135). Median social media site visits per week across all platforms was 30 (interquartile range, 9–57). Only 58 individuals (3.2%) reported zero site visits per week.

There were significant bivariable associations between PSI and each of the primary SMU variables. Compared with those who used social media <30 minutes per day, those who used social media ≥121 minutes per day had about double the odds for increased PSI (OR=2.0, 95% CI=1.4, 2.8) (Table 2). Similarly, compared with those who visited social media platforms fewer than nine times per week, those who visited ≥58 times per week had about triple the odds of increased PSI (OR=3.4, 95% CI=2.3, 5.0) (Table 3).

Bivariable analyses also showed significant associations between PSI and two covariates: relationship status and yearly household income (Tables 1 and 2). Compared with single individuals, married individuals had lower odds of having higher PSI (Table 2). Similarly,

Table 1. Social Media Use and Sociodemographic Characteristics According to Perceived Social Isolation: 2014 U.S. Survey

Independent variables	Whole sample, column %[a]	Low PSI, column %[a] (*n*=699)	Medium PSI, column %[a] (*n*=549)	High PSI, column %[a] (*n*=537)	*p*-value[b]
Social media use					
Time, minutes/day					0.002
Quartile 1 (0–30)	29.8	35.4	28.2	22.3	
Quartile 2 (31–60)	20.8	21.8	23.2	16.3	
Quartile 3 (61–120)	24.0	22.8	21.0	29.6	
Quartile 4 (≥121)	25.5	20.1	27.6	31.9	
Frequency, visits per week[c,d]					<0.001
Quartile 1 (0–8)	28.3	37.7	23.8	18.2	
Quartile 2 (9–30)	25.1	23.6	30.1	21.3	
Quartile 3 (31–57)	24.1	22.3	26.5	24.1	
Quartile 4 (≥58)	22.5	16.4	19.6	36.4	
Sociodemographic					
Age, years					0.09
19–23	33.7	32.9	33.7	34.8	
24–26	24.8	21.6	30.5	23.1	
27–32	41.6	45.5	35.9	42.1	
Sex					0.07
Female	50.3	45.7	55.0	52.2	
Male	49.7	54.3	45.0	47.8	
Race					0.06
White, non-Hispanic	57.5	58.1	56.7	57.3	
Black, non-Hispanic	13.0	15.3	9.9	12.9	
Hispanic	20.6	21.4	20.4	19.6	
Other[e]	8.9	5.2	13.0	10.2	
Relationship status					<0.001
Single/widowed/divorced	44.5	36.1	50.6	51.0	
Married/committed relationship	55.6	63.9	49.4	49.0	
Living situation					0.003
Parent/guardian	34.0	34.5	33.5	33.8	
Significant other	35.6	41.4	27.9	35.4	
Other[f]	30.4	24.1	38.5	30.9	
Yearly household income, $					0.003
<30,000	22.9	18.8	20.5	32.7	
30,000–74,999	38.4	40.8	41.2	31.2	
≥75,000	38.7	40.5	38.3	36.1	
Education level					0.95
High school or less	36.0	36.7	34.6	36.3	
Some college	38.3	37.0	39.8	38.8	
Bachelor's degree or higher	25.7	26.3	25.6	25.0	

Note: The sample size was N=1,785.
[a]Values may not total 100 due to rounding. Column percentages are based upon survey weighted data, therefore may not be congruent with the cell frequency proportion of total N.
[b]*p*-value derived using chi-square analyses comparing proportion of users in each category.
[c]Includes Facebook, Twitter, Google+, YouTube, LinkedIn, Instagram, Pinterest, Tumblr, Vine, Snapchat, and Reddit.
[d]Based on weighted averages using a 7-point Likert-type response scale ranging from "I don't use this platform" to "5 or more times a day."
[e]Includes multiracial.
[f]Defined as not living with a parent/guardian or significant other.
PSI, perceived social isolation.

compared with those who earned <$30,000 per year, those earning >$75,000 had lower odds of increased PSI (Table 2).

In a fully adjusted model, compared with those in the lowest quartile, participants in the highest quartile of time of SMU had significantly greater odds of increased

Table 2. Associations Between Time of Social Media Use and Perceived Social Isolation: 2014 U.S. Survey

Social media use	PSI,[a] OR (95% CI)	p-value[b]	PSI,[a] AOR[c] (95% CI)	p-value[b]
Time, minutes/day[d]		**<0.001**		**<0.001**
Quartile 1 (0–30)	ref		ref	
Quartile 2 (31–60)	1.2 (0.8, 1.7)		1.2 (0.9, 1.7)	
Quartile 3 (61–120)	**1.7 (1.2, 2.5)**		**1.6 (1.1, 2.4)**	
Quartile 4 (≥121)	**2.0 (1.4, 2.8)**		**2.0 (1.4, 2.8)**	
Age, years		0.37		0.83
19–23	ref		ref	
24–26	1.1 (0.8, 1.4)		1.1 (0.8, 1.6)	
27–32	0.9 (0.6, 1.2)		1.0 (0.7, 1.4)	
Sex				
Female	ref		ref	
Male	0.8 (0.6, 1.02)		0.9 (0.7, 1.1)	
Race				
White, non-Hispanic	ref		ref	
Black, non-Hispanic	0.8 (0.5, 1.3)		0.6 (0.4, 1.1)	
Hispanic	1.0 (0.7, 1.4)		0.8 (0.5, 1.2)	
Other[e]	**1.6 (1.1, 2.4)**		1.4 (0.9, 2.1)	
Relationship status				
Single/widowed/divorced	ref		ref	
Married/committed relationship	**0.6 (0.5, 0.8)**		**0.6 (0.4, 0.8)**	
Living situation				
Parent/guardian	ref		ref	
Significant other	0.8 (0.6, 1.2)		1.3 (0.8, 2.0)	
Other[f]	1.3 (0.9, 1.7)		1.2 (0.8, 1.6)	
Yearly household income, $		**0.01**		**0.01**
<30,000	ref		ref	
30,000–74,999	**0.6 (0.4, 0.8)**		**0.6 (0.4, 0.8)**	
≥75,000	**0.6 (0.4, 0.9)**		**0.6 (0.4, 0.8)**	
Education level		0.95		0.55
High school or less	ref		ref	
Some college	1.1 (0.8, 1.5)		1.1 (0.8, 1.6)	
Bachelor's degree or higher	1.0 (0.7, 1.4)		1.1 (0.8, 1.6)	

Note: Boldface indicates statistical significance ($p<0.05$).
[a]Perceived social isolation is divided into low, medium, and high tertiles.
[b]Significance level determined by post-estimate tests for an overall linear trend of an ordered categorical independent variable. Therefore, these values are not applicable in the case of a non-ordered categorical variable such as race or living situation.
[c]Adjusted for age, sex, race, relationship status, living situation, household income, and education level.
[d]Includes Facebook, Twitter, Google+, YouTube, LinkedIn, Instagram, Pinterest, Tumblr, Vine, Snapchat, and Reddit.
[e]Includes multiracial.
[f]Defined as not living with a parent/guardian or significant other.
PSI, perceived social isolation.

PSI (AOR=2.0, 95% CI=1.4, 2.8) (Table 2). This association showed a strong linear effect ($p<0.001$) (Table 2). The only other variables significantly associated with PSI in the multivariable model were relationship status and yearly household income (Table 2).

In a second fully adjusted model, compared with those in the lowest quartile, participants in the highest quartile of frequency of SMU had significantly greater odds of increased PSI (AOR=3.4, 95% CI=2.3, 5.1) (Table 3). This association also showed a strong linear effect ($p<0.001$) (Table 3). Again, the only other variables significantly associated with PSI were relationship status and yearly household income (Table 3).

DISCUSSION

Among a nationally representative cohort of individuals aged 19–32 years, there were robust linear associations between increased SMU and increased PSI, even after adjusting for a comprehensive set of covariates.

Because the data were cross-sectional, the directionality of this association cannot be determined based on

Table 3. Associations Between Frequency of Social Media Use and Perceived Social Isolation: 2014 U.S. Survey

Social media use	PSI,[a] OR (95% CI)	p-value[b]	PSI,[a] AOR[c] (95% CI)	p-value[b]
Frequency, visits per week[d,e]		**<0.001**		**<0.001**
Quartile 1 (<9)	ref		ref	
Quartile 2 (9–30)	**1.8 (1.3, 2.5)**		**1.8 (1.3, 2.6)**	
Quartile 3 (31–57)	**1.9 (1.3, 2.8)**		**1.9 (1.3, 2.8)**	
Quartile 4 (≥58)	**3.4 (2.3, 5.0)**		**3.4 (2.3, 5.1)**	
Age, years		0.37		0.63
19–23	ref		ref	
24–26	1.1 (0.8, 1.4)		1.2 (0.9, 1.7)	
27–32	0.9 (0.6, 1.2)		1.1 (0.8, 1.6)	
Sex				
Female	ref		ref	
Male	0.8 (0.6, 1.02)		0.8 (0.7, 1.1)	
Race				
White, non-Hispanic	ref		ref	
Black, non-Hispanic	0.8 (0.5, 1.3)		0.7 (0.4, 1.2)	
Hispanic	1.0 (0.7, 1.4)		0.8 (0.6, 1.2)	
Other[f]	**1.6 (1.1, 2.4)**		1.4 (0.9, 2.1)	
Relationship status				
Single/widowed/divorced	ref		ref	
Married/committed relationship	**0.6 (0.5, 0.8)**		**0.6 (0.4, 0.8)**	
Living situation				
Parent/guardian	ref		ref	
Significant other	0.8 (0.6, 1.2)		1.2 (0.8, 1.9)	
Other[g]	1.3 (0.9, 1.7)		1.1 (0.8, 1.6)	
Yearly household income, $		**0.01**		**0.007**
<30,000	ref		ref	
30,000–74,999	**0.6 (0.4, 0.8)**		**0.6 (0.4, 0.8)**	
≥75,000	**0.6 (0.4, 0.9)**		**0.6 (0.4, 0.8)**	
Education level		0.95		0.97
High school or less	ref		ref	
Some college	1.1 (0.8, 1.5)		1.1 (0.8, 1.5)	
Bachelor's degree or higher	1.0 (0.7, 1.4)		1.0 (0.7, 1.4)	

Note: Boldface indicates statistical significance ($p < 0.05$).
[a]Perceived social isolation is divided into low, medium, and high tertiles.
[b]Significance level determined by post-estimate tests for an overall linear trend of an ordered categorical independent variable. Therefore, these values are not applicable in the case of a non-ordered categorical variable such as race or living situation.
[c]Adjusted for age, sex, race, relationship status, living situation, household income, and education level.
[d]Includes Facebook, Twitter, Google+, YouTube, LinkedIn, Instagram, Pinterest, Tumblr, Vine, Snapchat, and Reddit.
[e]Based on a 7-point Likert-type response scale ranging from "I don't use this platform" to "5 or more times a day."
[f]Includes multiracial.
[g]Defined as not living with a parent/guardian or significant other.
PSI, perceived social isolation.

these data alone. It may be that individuals who are already feeling socially isolated tend to subsequently use more social media; those with fewer "in-person" social outlets may turn to online networks as a substitute. For example, individuals with mental illnesses report using social media to reach out to others.[32] Indeed, ecological systems theory emphasizes the fluid nature of relationship formation based on current environmental constraints.[33]

Another possibility is that those who use increased amounts of social media subsequently develop increased social isolation. Though in some ways this may seem counterintuitive, there are possible mechanisms. First, increased time spent on social media may displace more-authentic social experiences that might truly decrease social isolation. Second, certain characteristics of the online milieu may facilitate feelings of being excluded. For example, an individual may discover pictures or other evidence of events to which they were not invited. Finally, instead of accurately representing reality, social media feeds are in fact highly curated by their owners.[34] Exposure to such highly idealized representations of

peers' lives may elicit feelings of envy and the distorted belief that others lead happier and more successful lives, which may increase PSI.[35]

Although this study focused on PSI, an important direction for future research will be to examine interrelationships among SMU and both subjective and objective social isolation. For example, it would be interesting to distinguish whether increased SMU—though being associated with the perception of increased isolation—may actually provide increased social opportunities that are not optimized. For example, researchers have found that many people feel they are not able to translate online interaction into "real" social relationships.[36] Thus, a potential avenue for public health intervention would be to help individuals leverage online interactions into more-meaningful and potentially protective relationships.

This study focused on self-reported overall time and frequency of SMU. However, it should be emphasized that not all SMU is the same, and future research should examine more-specific social media exposures. For example, some users tend to passively consume social media content whereas others engage in more active communication. It may be that those who are more active feel more engaged and derive more social capital from social media interactions.[37] However, it may also be that active users are more prone to having negative experiences such as arguments or being "unfriended," both of which ultimately can feel isolating.

Although overall results suggest associations between increased SMU and increased PSI on a population level, certain individuals or groups may derive social benefit from SMU. For example, individuals with certain health conditions may find it useful to connect over social media, especially if they are geographically isolated. Prior studies have demonstrated value for these types of networks.[38,39] Similarly, individuals with certain personality types (e.g., extroverted versus introverted) might derive more or less benefit.

Because many socially isolated people use social media, this may be a good medium for intervention. Though this study raises potential concerns, there also may be useful ways of leveraging social media to identify socially isolated individuals and helping them connect to in-person networks. Understanding the relationship between SMU and social isolation will help to ensure that these interventions are appropriately designed and provide the support necessary.

Limitations

Given the large sample size, it was not feasible to use "gold standard" measures of social media exposure such as ecological momentary assessment or data downloaded directly from social media sites. It would be valuable for future work to use more-intensive measures of SMU, because self-reported SMU is subject to recall and social desirability biases. This might account for the fact that the estimates of SMU noted here were somewhat lower than have been reported elsewhere.[40] Related to this, it should be emphasized that these measures of SMU were composite measures including time and frequency of use of 11 different platforms. It would be useful for future work to parse out each platform individually to help hone understanding of these associations. Finally, it should be reiterated that this study focused on young adults aged 19–32 years; therefore, these results cannot be generalized to other populations, such as older adults.

CONCLUSIONS

Despite these limitations, it is noteworthy that increased SMU was strongly and independently associated with increased PSI in a nationally representative sample of young adults. As social media platforms continue to evolve, it will be valuable for future assessments use more fine-grained measurements in order for recommendations about SMU and PSI to be appropriately targeted.

ACKNOWLEDGMENTS

This research was funded by the National Cancer Institute at NIH (R01-CA140150), awarded to Dr. Primack. The funding source had no role in the study design; collection, analysis, interpretation of data; writing of the manuscript; or the decision to submit this manuscript for publication.

No financial disclosures were reported by the authors of this manuscript.

REFERENCES

1. Nicholson R. A review of social isolation: an important but underassessed condition in older adults. *J Prim Prev.* 2012;33(2-3):137–152. http://dx.doi.org/10.1007/s10935-012-0271-2.
2. Pantell M, Rehkopf D, Jutte D, Syme SL, Balmes J, Adler N. Social isolation: a predictor of mortality comparable to traditional clinical risk factors. *Am J Public Health.* 2013;103(11):2056–2062. http://dx.doi.org/10.2105/AJPH.2013.301261.
3. Holt-Lunstad J, Smith TB, Baker M, Harris T, Stephenson D. Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspect Psychol Sci.* 2015;10(2):227–237. http://dx.doi.org/10.1177/1745691614568352.
4. Cacioppo JT, Hawkley LC. Perceived social isolation and cognition. *Trends Cogn Sci.* 2009;13(10):447–454. http://dx.doi.org/10.1016/j.tics.2009.06.005.
5. Stuller KA, Jarrett B, DeVries AC. Stress and social isolation increase vulnerability to stroke. *Exp Neurol.* 2012;233(1):33–39. http://dx.doi.org/10.1016/j.expneurol.2011.01.016.
6. Dang YH, Liu P, Ma R, et al. HINT1 is involved in the behavioral abnormalities induced by social isolation rearing. *Neurosci Lett.* 2015;607:40–45. http://dx.doi.org/10.1016/j.neulet.2015.08.026.

7. Steptoe A, Shankar A, Demakakos P, Wardle J. Social isolation, loneliness, and all-cause mortality in older men and women. *Proc Natl Acad Sci U S A*. 2013;110(15):5797–5801. http://dx.doi.org/10.1073/pnas.1219686110.
8. Holwerda TJ, Beekman ATF, Deeg DJH, et al. Increased risk of mortality associated with social isolation in older men: only when feeling lonely? Results from the Amsterdam Study of the Elderly (AMSTEL). *Psychol Med*. 2012;42(4):843–853. http://dx.doi.org/10.1017/S0033291711001772.
9. Holwerda TJ, Deeg DJH, Beekman ATF, et al. Feelings of loneliness, but not social isolation, predict dementia onset: results from the Amsterdam Study of the Elderly (AMSTEL). *J Neurol Neurosurg Psychiatry*. 2014;85(2):135–142. http://dx.doi.org/10.1136/jnnp-2012-302755.
10. Matthews T, Danese A, Wertz J, et al. Social isolation, loneliness and depression in young adulthood: a behavioural genetic analysis. *Soc Psychiatry Psychiatr Epidemiol*. 2016;51(3):339–348. http://dx.doi.org/10.1007/s00127-016-1178-7.
11. Steinfield C, Ellison NB, Lampe C. Social capital, self-esteem, and use of online social network sites: a longitudinal analysis. *J Appl Dev Psychol*. 2008;29(6):434–445. http://dx.doi.org/10.1016/j.appdev.2008.07.002.
12. Ellison NB, Steinfield C, Lampe C. The benefits of facebook "friends": social capital and college students' use of online social network sites. *J Comput Commun*. 2007;12(4):1143–1168. http://dx.doi.org/10.1111/j.1083-6101.2007.00367.x.
13. Roisman GI, Masten AS, Coatsworth JD, Tellegen A. Salient and emerging developmental tasks in the transition to adulthood. *Child Dev*. 2004;75:123–133. http://dx.doi.org/10.1111/j.1467-8624.2004.00658.x.
14. Pew Research Center. Social media update 2015. www.webcitation.org/6ajEhvS11. Published 2015. Accessed June 8, 2016.
15. Shensa A, Sidani JE, Lin L, Bowman N, Primack BA. Social media use and perceived emotional support among U.S. young adults. *J Community Health*. 2016;41(3):541–549. http://dx.doi.org/10.1007/s10900-015-0128-8.
16. Kross E, Verduyn P, Demiralp E, et al. Facebook use predicts declines in subjective well-being in young adults. *PLoS One*. 2013;8(8):e69841. http://dx.doi.org/10.1371/journal.pone.0069841.
17. Chou HTG, Edge N. "They are happier and having better lives than I am": the impact of using Facebook on perceptions of others' lives. *Cyberpsychol Behav Soc Netw*. 2012;15(2):117–121. http://dx.doi.org/10.1089/cyber.2011.0324.
18. Sagioglou C, Greitemeyer T. Facebook's emotional consequences: why Facebook causes a decrease in mood and why people still use it. *Comput Human Behav*. 2014;35:359–363. http://dx.doi.org/10.1016/j.chb.2014.03.003.
19. Lin LY, Sidani JE, Shensa A, et al. Association between social media use and depression among U.S. young adults. *Depress Anxiety*. 2016;33(4):323–331. http://dx.doi.org/10.1002/da.22466.
20. Arnett JJ, Zukauskiene R, Sugimura K. The new life stage of emerging adulthood at ages 18-29 years: implications for mental health. *Lancet Psychiatry*. 2014;1(7):569–576. http://dx.doi.org/10.1016/S2215-0366(14)00080-7.
21. GfK KnowledgePanel®. KnowledgePanel Design Summary. www.webcitation.org/6ajEWO5mb. Published 2013.
22. Baker R, Blumberg SJ, Brick JM, et al. Research synthesis. *Public Opin Q*. 2010;74(4):711–781. http://dx.doi.org/10.1093/poq/nfq048.
23. Wagner TH, Baker LC, Bundorf MK, Singer S. Use of the Internet for health information by the chronically ill. *Prev Chronic Dis*. 2004;1(4):A13.
24. Cella D, Riley W, Stone A, et al. The Patient-Reported Outcomes Measurement Information System (PROMIS) developed and tested its first wave of adult self-reported health outcome item banks: 2005-2008. *J Clin Epidemiol*. 2010;63(11):1179–1194. http://dx.doi.org/10.1016/j.jclinepi.2010.04.011.
25. Cella D, Gershon R, Lai J-S, Choi S. The future of outcomes measurement: item banking, tailored short-forms, and computerized adaptive assessment. *Qual Life Res*. 2007;16(suppl 1):133–141. http://dx.doi.org/10.1007/s11136-007-9204-6.
26. Hahn EA, DeWalt DA, Bode RK, et al. New English and Spanish social health measures will facilitate evaluating health determinants. *Health Psychol*. 2014;33(5):490–499. http://dx.doi.org/10.1037/hea0000055.
27. Carle AC, Riley W, Hays RD, Cella D. Confirmatory factor analysis of the patient reported outcomes measurement information system (PROMIS) adult domain framework using item response theory scores. *Med Care*. 2015;53(10):894–900. http://dx.doi.org/10.1097/MLR.0000000000000413.
28. Stacciarini JM, Smith R, Garvan CW, Wiens B, Cottler LB. Rural Latinos' mental wellbeing: a mixed-methods pilot study of family, environment and social isolation factors. *Community Ment Health J*. 2015;51(4):404–413. http://dx.doi.org/10.1007/s10597-014-9774-z.
29. Johnston KL, Lawrence SM, Dodds NE, Yu L, Daley DC, Pilkonis PA. Evaluating PROMIS® instruments and methods for patient-centered outcomes research: patient and provider voices in a substance use treatment setting. *Qual Life Res*. 2016;25(3):615–624. http://dx.doi.org/10.1007/s11136-015-1131-3.
30. Nielsen. State of the media: the social media report 2012. www.webcitation.org/6bXTvRwTJ. Published 2012. Accessed June 8, 2016.
31. Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry*. 2005;62(6):617–627. http://dx.doi.org/10.1001/archpsyc.62.6.617.
32. Gowen K, Deschaine M, Gruttadara D, Markey D. Young adults with mental health conditions and social networking websites: seeking tools to build community. *Psychiatr Rehabil J*. 2012;35(3):245–250. http://dx.doi.org/10.2975/35.3.2012.245.250.
33. Bronfenbrenner U. The Ecology of Human Development: Experiments by Nature and Design. Cambridge, MA: Harvard University Press.
34. Madden M, Lenhart A, Cortesi S, et al. *Teens, social media, and privacy*. Washington, DC: Pew Research Center, 2013. www.pewinternet.org/files/2013/05/PIP_TeensSocialMediaandPrivacy_PDF.pdf.
35. Tandoc EC, Ferrucci P, Duffy M. Facebook use, envy, and depression among college students: is facebooking depressing? *Comput Human Behav*. 2015;43:139–146. http://dx.doi.org/10.1016/j.chb.2014.10.053.
36. Tufekci Z, Brashears ME. Are we all equally at home socializing online? Cyberasociality and evidence for an unequal distribution of disdain for digitally-mediated sociality. *Information Commun Soc*. 2014;17(4):486–502. http://dx.doi.org/10.1080/1369118X.2014.891634.
37. Ellison NB, Steinfield C, Lampe C. The benefits of Facebook "friends": social capital and college students' use of online social network sites. *J Comput Commun*. 2007;12(4):1143–1168. http://dx.doi.org/10.1111/j.1083-6101.2007.00367.x.
38. Craig D, Strivens E. Facing the times: a young onset dementia support group: Facebook TM style. *Australas J Ageing*. 2016;35(1):48–53. http://dx.doi.org/10.1111/ajag.12264.
39. Beaudoin CE, Tao CC. Benefiting from social capital in online support groups: an empirical study of cancer patients. *CyberPsychology Behav*. 2007;10(4):587–590. http://dx.doi.org/10.1089/cpb.2007.9986.
40. Duggan M. Mobile messaging and social media 2015. Pew Research Center. *Pew Res Center's Internet Sci Tech*. 2015. http://www.webcitation.org/6hzf7nGFm.